

# **TSCA “Inadvertent Generation of PCBs in Manufactured Products”**

## **Stakeholder Meeting to Develop Reform Strategies**

### **January 15, 2014**

#### **Goal:**

Change TSCA regulations to prohibit inadvertently generated PCB's in manufactured products produced or imported into the United States

#### **Strategy:**

Nationalize issue and provide practical solutions for key EPA policy decision makers

#### **Objectives:**

Expand coalition of environmental groups, tribes, state and local governments, elected officials and industries supporting reforms

Attract national media attention

Bring issue to attention of key policy decision makers – Obama Administration – EPA

Expand congressional advocates

Explore legal options

Effectively counter American Chemistry Council and Color Pigment Manufacturers Association arguments and lobbying efforts in support of current regulations

#### **Key Messages:**

PCB Regulatory Paradox – Federal regulations are responsible for contamination of the environment with allowable PCBs in consumer products, then Federal regulations subject dischargers (ratepayers and businesses) to standards that are nearly a billion times lower

PCBs harm the environment and are a risk to human health

EPA is currently not addressing inadvertently manufactured PCBs in TSCA reform

Many products, such as inks and dyes, can be made without creating PCBs, and PCB-free alternative products must be discovered to achieve WQS and prevent contamination of the environment (paint – lead, VOC's, metals)

Federal, State, and Tribal Clean Water standards, which are orders of magnitude less than the Federal allowance (50 ppm) cannot be met with current technology for PCBs

WWTPs may be subject to fines and citizen lawsuits for non-compliance of WQS

**TSCA PCB Strategy Meeting  
Inland Empire Paper Company  
January 15, 2014**

Confirmed Attendees:

1. Doug Krapas [dougkrapas@iepc.com]
2. Tanya Riordan [Tanya\_Riordan@cantwell.senate.gov]
3. Rick Eichstaedt [ricke@cforjustice.org]
4. Don Keil DONKEIL@cdaid.org] for Sid Fredrickson
5. Bart Mihailovich [bart@cforjustice.org]
6. Jeffrey Bell [JeffreyB@gallatinpa.com]
7. Mike Petersen [mpetersen@landscouncil.org]
8. Dale Arnold [DArnold@SpokaneCity.org]
9. Mike Poulson[walf@bossig.com], Cathy McMorris Rogers
10. Ken Windram [ken@harsb.org]
11. Moss, David [DMoss@spokanecounty.org]
12. Lynn Schmidt [lschmidt@spokanecity.org]
13. Michael Neher [mneher@postfallsidaho.org]
14. Jared Webley [JaredW@gallatinpa.com]
15. Robert Lindsay [RLindsay@spokanecounty.org]
16. Zach Bloxham, Gonzaga University
17. Adriane Borgias (ECY) [ABOR461@ECY.WA.GOV]

Confirmed Attendees via Conference Call:

1. John Revier [John.Revier@mail.house.gov], Congressman Simpson
2. Sheila Collins [Sheila.Collins@gov.wa.gov], Governor Inslee
3. Jeremy Chou, Givens Pursley [jcc@givenspursley.com], Representing ID Cities
4. Lisa Dally Wilson [lisadallywilson@gmail.com]
5. Dianne Barton [bard@critfc.org]

## **TALKING POINTS**

### **TSCA PCB Coalition, 0/15/14**

#### **A. Problem:**

- TSCA Allowance of 50 ppm maximum (25 ppm annual average)
- Results in PCBs in consumer products (200 chemical processes/70 high potential)
- EPA estimates 100,000 pounds/year produced
- Paints, Printing inks, Ag chemicals, Plastics and Detergent Bars
- IEP Recycle – printing inks (Not a “True Source”, do not generate, remove 90%)
- Municipal WWTPs – clothing dyes, detergent bars, people waste (200 to 800 ppb in blood)
- Ambient Deposition (Ag chemicals, paints – Rutgers, Rodenburg, Ubiquitous Dist., Alpine Lakes)
- Untenable Situation for WQ compliance (Chart)
- No current technologies
- Eliminate recycling of paper
- Puts WWTP’s in non-compliance, Fines & Citizen lawsuits
- Perpetual investment into plant upgrades
- Shifts cost from manufacturer’s to ratepayers and businesses, end-of-pipe treatment expensive
  
- Thousands (5,578) of PCB 303d listings in U.S.
- Spokane River watershed Beta test site (ppq)
- Discharger’s Insignificant Source
- Unable to achieve WQS

#### **B. Actions to Date:**

- At a pivotal time - EPA’s Reassessment of PCB Use Authorizations (2010)
- IEP is taking a leadership role in addressing PCB import issue
- IEP teamed with Riverkeepers & Lands Council to submit response to ANPRM
- Engaged WA Ecology, then Director Ted Sturdevant, also Chair of ECOS
- ECOS – Doug, Rick & Rodenburg to Boulder, Resolution
- Followed by several other resolution from Trade Organizations & SRRTTF
- Letters to EPA:
  - Congressman Simpson, Chair of the House Interior, Environment
  - Riverkeepers, Bart Mahalovich
  - SRRTTF – Adriane Update?
- Adriane Borgias to D.C. – met with EPA Toxics & WQ Programs
- Dianne Barton, Tribal Toxics Council meeting with EPA
  - Tribal Letters to EPA (Status?)
- EPA Small Business Advisory Panel - Doug & Rick (Support Letters SRRTTF, Murray & Cantwell)
- Education of various Legislators, Murray, Cantwell, McMorris-Rogers
  
- All of this to no avail

#### **C. Develop Strategies:**

- 2 Mechanisms:
  - Through EPA rulemaking reform of TSCA
  - Legislation - Senators Frank Lautenberg (D-NJ) and David Vitter (R-LA) – Chemical Safety Improvement Act

## Inland Empire Paper's Efforts on TSCA PCB Reform 2014 Summary

### **Working Documents:**

1. General Narrative – PCB Paradox
2. Fact Sheet
3. IEP Fact Sheet
4. Presentation

### **IEP has made presentations to:**

1. Meeting with David Widowski, from the Exposure and Technology division of OPPTS, March 20, 2014
2. Call w/American Chemistry Council (Tim Shestek) on February 20, 2014
3. Met w/WA State Agency Directors on May 19, 2014 (Dept. of Ecology, Dept. of Commerce, Employment Security, & Labor and Industries)
4. Members of Blue-Green Alliance (USW, Sierra Club and Governor's Office-Chris Davis) met at IEP on July 17, 2014

### **Legislative Efforts:**

1. Washington Congressional delegation:
  - o Ongoing conversations with Senator Murray's staff (John Culton, E. WA Director & Denise Dickinson, D.C. Legislative Fellow)
  - o Assisting w/conversations w/Barbara Boxer (Chairs the Senate Environment and Public Works Committee)
  - o Discuss option of providing grants to develop alternative inks & pigments
2. Idaho Congressional delegation:
  - o Met with Senator Crapo on May 31, 2014
3. SB 6086 PCB in Products bill passed during 2014 session (IEP lobbying effort), requires state agencies to purchase PCB-free products.

### **Media:**

1. Washington Examiner by Ron Arnold, March 6, 2014: "Solving the PCB problem with cooperation instead of litigation"
2. EarthFix, August 7, 2014: "Report: Banned Toxic PCB Still Showing Up In Everyday Products"

### **Committees (in an effort to further knowledge and correct the TSCA concern):**

- WA Department of Ecology, PCB Chemical Action Plan – served on advisory committee and pushed for inclusion of the TSCA concern to be included in CAP.
- Spokane River Regional Toxics Task Force (SRRTTF)

## TSCA Reform Background Information DRAFT

### PCB Paradox

In 1978, EPA terminated the manufacturing and distribution of PCB-containing products in the U.S. PCBs are a suspected carcinogen and were used in many fluids and products including; hydraulics, transformers, paints, glues, and insecticides. There are 209 different types of PCBs, of which twelve are considered toxic by the international community. EPA's overarching goal is to eliminate PCBs from our environment.

However, federal regulations through 40 CFR (Code of Federal Regulations) and the Toxic Substances Control Act (TSCA) administered by EPA, still allow products and imported materials, including pigments, inks and dyes, to contain PCB levels up to 50 parts per million (ppm). These are called "inadvertent" PCBs, since they are a consequence of the manufacturing process. There are over 200 chemical processes that can produce inadvertent PCB's that ultimately are used in hundreds of today's products and consumer goods. But according to the EPA as long as the content is under 50 parts per million, they are considered PCB free and do not pose a risk to human health or the environment. Products known to contain inadvertent PCBs include; caulk, paint, plastics, newspapers, magazines, food and beverage packaging, plastic bags, and color fabrics used for adult and children's clothing

Along with the potential environmental and health risks, the current allowance of "inadvertent" PCBs creates significant economic risk to municipalities and businesses due to a "PCB Regulatory Paradox". While EPA allows PCB levels up to 50 ppm in products, Federal PCB water quality regulations allow only 0.000000064 ppm for any wastewater discharge. Put another way, the EPA PCB discharge regulation is over 200 million times lower than the 50 ppm Federal allowance in products. It is important to note that there are currently no technologies to meet this PCB standard.

The TSCA allowance for inadvertent PCBs shifts the cost from PCB containing product manufacturers to ratepayers and businesses that are responsible for expensive end-of-pipe removal. Since there are no technologies currently available to meet the end-of-pipe standards, this places wastewater treatment plants in a continual state of non-compliance, subjects them to fines and citizen lawsuits, and a perpetual investment into plant upgrades in an effort to achieve the standard.

A study commissioned by the Association of Washington Cities, Association of Washington Counties and Association of Washington Businesses (AWB) conducted by the engineering firm HDR estimated that an existing 5 million gallon per day wastewater facility using the best available technology would spend an additional \$75 million to \$250 million on treatment over the life of the facility (estimated at 25 years) in an effort to meet the proposed standards. New facilities of the same capacity would need to spend approximately \$117 million to \$388 million in an effort to meet the standard. The City of Bellingham estimates sewer bills would rise from the current \$35 a month to somewhere between \$200 and \$250 a month to upgrade their

wastewater treatment facility. The study found that even with all of these investments in the most advanced water treatment technologies, they would still not be able to meet the standards for PCBs.

An example of how this would impact industry comes from Inland Empire Paper Company (IEP) in Spokane Washington, which manufactures newsprint for clients across North America. The company uses recycled newspapers and magazines to produce their specialty paper products. Since recycled newspapers are printed with inks that contain allowable PCBs under TSCA, trace amounts end up in their wastewater discharge (less than 1 ounce per year). IEP will likely have to stop recycling newspapers to meet forthcoming PCB regulations. This not only impacts IEP, but potentially every other newspaper recycling facility in the U.S.

The solution for addressing the environmental, health and economic harm done by "inadvertent" PCBs is straight forward – ban the use of chemical processes that inadvertently produce PCBs by eliminating the current TSCA exemption. . Contrary to pronouncements made by the Color Pigment Manufacturers Association, there are alternative manufacturing methods for pigments that do not produce inadvertent PCBs. There are many examples in the past where bans have resulted in safer products, including: the elimination of lead and metals in paints, the reduction of VOC's In paints, elimination of asbestos as a fire retardant, and DDT as an insecticide. When faced with bans on products that are determined to cause harm to the environment or human health, the ingenuity of industry has always discovered safer alternatives.

The timing is right to make this change. Currently, EPA is reviewing and will be proposing updates to the TSCA regulations. A coalition of environmental groups, tribes, governments and industry are working together advocating for TSCA reform. This includes; joint letters from industry and environmental groups to EPA expressing their collective perspective, a unanimous resolution from the Environmental Council of States (ECOS) supporting EPA's reassessment of the TSCA allowance, similar resolutions from various Northwest Indian Tribes and trade organizations, and briefings with Northwest Legislators and Congressional delegation. However, to date, none of these efforts have persuaded the EPA to review this glaring environmental and health problem that has a straight forward remedy.

In addition to the TSCA reform effort, Congress is working on legislation to update the Chemical Safety Improvement Act which provides another opportunity to change existing regulations.

We firmly believe this broad coalition of local and national environmental, tribal, government and industry groups have the ability to bring about TSCA reforms to eliminate or greatly reduce the presence of PCBs in our environment. But we need your help. We need you to advocate for changing TSCA to your Members of Congress and EPA headquarters in Washington D.C.

Many thanks for your assistance on this important issue.



## **Inland Empire Paper Company**

### **PCB FACT SHEET**

- IEP was a PCB free mill prior to 1991 as confirmed by EPA
- It was only after IEP began to recycle in 1991 that PCBs were discovered in its effluent
- These PCBs have been traced to the inks used in the newsprint etc that IEP recycles
- Federal regulations through the Toxic Substances Control Act (TSCA) allow consumer products to contain inadvertent PCBs with concentrations up to 50 parts per million (ppm)
- Inks and pigments used in the publishing of newspapers and magazines contain trace amounts of PCBs as a byproduct of their manufacturing processes
- Many of these same pigments are used in other products such as paints, caulking, and insecticides
- The Federal allowance (50 ppm) is 20,000,000 times higher than the concentration of PCBs in IEP's effluent
- PCBs make up approximately 0.000000000003 percent of IEP's discharge annually, and would fill only about a third of a shot glass if collected in one place
- Federal water quality standards regulate PCBs to 0.000000064 ppm, a full 781,250,000 times more stringent than the 50 ppm allowance
- There are no current technologies available to remove PCBs down to the EPA's water quality standards
- Elimination of paper recycling may be the only viable option for IEP to meet forthcoming stringent water quality standards
- Elimination of paper recycling in the U.S. does not solve the problem, as the PCBs will just be moved to landfills and be dispersed to the environment from the stacks of incinerators
- IEP is part of the solution, as our processes result in significant removal of PCBs from the recycled paper – roughly 90% of PCBs that come into IEP's system are taken out
- There is a more obvious and logical solution that eliminates the creation of new PCBs into the environment: enact regulatory change
- Incentivize manufacturers to find safe alternative chemical processes by changing Federal regulations to ban chemical processes which result in inadvertent PCBs
- Experts – including members of the Washington State Department of Ecology – state that there are viable alternative manufacturing processes which produce inks without creating PCBs
- IEP, in collaboration with the Riverkeepers and the Lands Council, submitted a letter to EPA requesting a change to the TSCA regulations
- IEP is also working with legislators, labor representatives, Native American tribes, government agencies, and others to work towards changing this regulation
- Eliminating the source of PCBs entering the environment provides a common-sense alternative against the elimination of paper recycling

## PCB Paradox Fact Sheet

- In 1979, the Toxic Substances Control Act (TSCA) was signed into law, banning the manufacture or importation of polychlorinated biphenyls (PCBs) in the United States
- PCBs are everywhere: hydraulic fluids, foods, including butter and fish, solvents, oils, paints, glues, plastics, magazines, and insecticides, as well as many other products
- There are 209 different congeners of PCBs, of which 12 are considered toxic. All are suspected carcinogens, though only the 12 are potentially dangerous in typical concentrations
- EPA's overarching goal regarding PCBs is to eliminate them as much as possible from the environment
- Under TSCA, EPA allows manufactured products and imported materials to contain inadvertent PCBs of concentrations up to 50 parts per million (ppm). These products are often said to be "PCB free"
- These PCBs are the byproduct of chemical processes primarily used to produce inks and dyes
- These inks and dyes are used in hundreds of today's consumer products, creating numerous health and environmental concerns
- While EPA allows 50 ppm of PCBs in products, EPA requires water quality standards of 0.000000064 ppm (more than 780 million times more stringent) in any wastewater or storm water discharge – the PCB Paradox
- This shifts the responsibility and cost of removing PCBs from the manufacturers to municipalities, their rate payers (the public) and businesses that are responsible for end-of-pipe standards
- Since there are no current technologies to meet these standards, all wastewater treatment plants (both municipal and private) are considered to be out of compliance, and are therefore subject to lawsuits
- According to a study by the City of Bellingham, Washington, Technology to upgrade the removal of PCBs in their treatment plant would increase sewer rates from \$35 per month to up to \$250 per month and would still not meet the water quality standards
- Since there is no technology available to meet new PCB standards, all newspaper manufacturing facilities in the U.S. would have to stop recycling newspapers because they contain "inadvertent" PCBs
- According to the Washington Department of Ecology and other experts, there are viable alternative chemical processes to produce inks and dyes without creating "inadvertent" PCBs
- EPA is now reviewing TSCA for proposed modernization and changes
- A coalition of environmental groups, tribes, labor representatives, legislators, government agencies and industry are advocating for the phasing out of processes that produce "inadvertent PCBs"
- Phasing out these processes would reduce and eventually minimize the amount of PCBs entering our environment while also preventing the economic inequalities caused by this loophole





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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OFFICE OF THE REGIONAL  
ADMINISTRATOR

February 24, 2015

Ms. Adriane Borgias  
Spokane River Regional Toxics Task Force  
Washington State Department of Ecology  
4601 North Monroe Street  
Spokane, Washington 99205-1295

Dear Ms. Borgias:

Thank you for your October 23, 2013, letter on behalf of the Spokane River Regional Toxic Task Force to Jim Jones, Assistant Administrator for the Environmental Protection Agency's Office of Chemical Safety and Pollution Prevention, and Cynthia Giles, Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance, regarding the water quality challenges presented by polychlorinated biphenyls. I apologize for the delay in my response on behalf of the Agency, but your letter raises some particularly challenging issues for us. Specifically, your letter notes the potential problems from the release of inadvertently generated PCBs from products such as pigments, and requests that the EPA take two actions to address the problems. First, you ask that the EPA initiate enforcement of the existing prohibition on the imports of inadvertently generated PCBs at concentrations at or above 50 parts per million and, second, that EPA revise its regulations to eliminate all manufacture or import of inadvertently generated PCBs.

The EPA agrees with the Task Force on the importance of reducing PCBs in the environment and the need to look at all potential sources. The EPA participates on the Task Force and supports the collaborative approach being taken to reduce PCB sources in advance of completing a TMDL. Having approved the Spokane Tribe's water quality standards, the EPA understands the issues of concern associated with very low levels of PCBs and the challenges of meeting those standards.

Your request that the EPA initiate enforcement of the regulations regarding inadvertently generated PCBs raises very complex issues. Excluded Manufacturing Processes and the resulting products are excluded from the otherwise applicable statutory bans as long as certain requirements are met, including reporting those processes and products to the EPA and maintaining concentrations under specified limits. Given your request, we examined the potential for increased compliance and enforcement activity to address possible violations of these regulations and found a number of significant challenges. These challenges include the nature of the regulations, the EPA's ability to identify possible non-compliers, the resources necessary to implement an effective enforcement initiative, and the potential of any such initiative to effectively reduce PCB levels to meet water quality standards. Thus, an enforcement initiative targeted specifically at the regulations for inadvertently generated PCBs is not a promising approach.

Revising current regulations to reduce inadvertently generated PCBs presents both policy and scientific challenges. Before proposing more stringent regulations on the inadvertent generation of PCBs in pigments, the EPA would seek to further understand the complexities and contributions of not only PCB-11, but also other congeners that may be present in the Spokane River. At present, there are not sufficient data to assess such PCB congeners. However, in a step toward addressing this deficiency, the EPA has requested that toxicity testing on PCB-11, a congener identified to be incorporated into yellow

pigments, be conducted through the National Toxicology Program at the National Institute of Environmental Health Sciences.

Excluded Manufacturing Processes and associated products may generate or contain a variety of inadvertently generated PCB congeners other than PCB-11. There are Toxicity Equivalence Factors (TEFs) established for the dioxin-like congeners, but, prior to revising TSCA regulations or the EPA's recommended water quality criteria for PCBs, the EPA would want to rely on additional toxicity information for many of the non-dioxin-like individual congeners. The aggregation of PCB congeners may in some instances be problematic for risk assessment because the toxicity of different PCB congeners varies and a fixed water quality concentration for total PCBs may not adequately represent the variable toxicity of the various congeners actually present in a particular water body. While the EPA is not proposing to undertake a comprehensive analysis of the remaining PCB congeners, we are examining the characterization of PCBs in water bodies. As stated above, characterizing individual PCB congeners' contribution to risk presents challenges. Therefore, the aggregation of all PCBs in the EPA's recommended water quality criteria for PCBs (i.e., expressed as total PCBs) is one topic we are discussing.

We note that states have taken the initiative to assess toxicity of specific chemicals in the past. One example is the toxicity criteria program managed by California's Office of Environmental Health Hazard Assessment. This process may be a reasonable approach that Washington can take to address the allowable amounts of specific PCB congeners generated inadvertently.

As you know, the EPA intends to propose to restrict and/or eliminate many of the remaining authorized uses of higher-concentration liquid PCBs. These remaining uses are the largest reservoir of commercial mixtures (Aroclors) that contain the dioxin-like PCBs for which there have been health concerns for decades. While these proposed changes will not address the inadvertently generated non-dioxin-like PCBs identified in your letter, the EPA believes this effort will help to reduce potential exposure and risk from remaining dioxin-like PCB uses.

One potentially promising strategy to address PCBs inadvertently produced in products is Green Chemistry. The EPA has provided funding to Ecology to establish a Green Chemistry Center and is a member of the Advisory Board for the Center. The Green Chemistry Center plans to host a workshop later this year on PCBs inadvertently produced in inks and pigments, perhaps leading to improvements in the production and use of PCB-free inks and pigments.

I understand that, having not heard back from the EPA in so long, you recently requested a meeting with the EPA senior managers to discuss these issues. If you still would like to meet after you and the other members of the Task Force have had a chance to review this response, I would be happy to assist in getting the meeting organized. Please feel free to contact me or have your staff contact Tom Eaton, Director of our Washington Operations Office at (360) 753-8086 or by email at [eaton.thomas@epa.gov](mailto:eaton.thomas@epa.gov) if you still wish to proceed with the meeting.

Thank you again for your letter, and again, I apologize for the delay. I look forward to continuing our work together and protecting human health and the environment.

Sincerely,

A handwritten signature in dark ink, appearing to read "D. McLerran", followed by a small flourish.

Dennis J. McLerran  
Regional Administrator

cc: Wendy Cleland-Hamnett, Director, OPPT  
Susan Shinkman, Director, OCE  
Ken Kopocis, Deputy Assistant Administrator, OW  
Ed Kowalski, Director, OCE, Region 10  
Lauris Davies, Associate Director, OCE, Region 10  
Dan Opalski, Director, OWW, Region 10  
Kate Kelly, Director, AWT, Region 10